

What is claimed is:

1. A device for obtaining an indication of the intracranial pressure of a living body, comprising:

a positional sensor which determines an initial position of an elastic biological object when the intracranial pressure within the living body is zero and which determines a subsequent position of the elastic biological object when the intracranial pressure within the living body is unknown but greater than zero;

a pressure generator which applies an external pressure to the elastic biological object; and

a comparator which compares the initial position with the subsequent position so as to identify the unknown intracranial pressure of the living body as that external pressure which causes the subsequent position to be equal to the initial position.

2. The device of Claim 1 wherein the elastic biological object comprises a skull bone.

3. The device of Claim 2 wherein the pressure generator comprises an inflatable helmet.

4. The device of Claim 2 wherein the pressure generator comprises a piston and cylinder assembly mounted on a frame.

5. The device of Claim 1 wherein the elastic biological object comprises a tympanic membrane of an ear.
6. The device of Claim 5 wherein the pressure generator comprises a tube adapted for insertion into an ear.
7. A device for obtaining a measurement of the absolute pressure inside a cranium, comprising:
 - a sensor for detecting positional changes of a physiological object whose position changes in response to changes in intracranial pressure;
 - a pressure generating device with which a pressure is applied to the physiological object to restore the physiological object to an initial position representative of an initial intracranial pressure; and
 - a pressure indicator for sensing the pressure applied by the pressure generating device and indicating the pressure.
8. The device of Claim 7 wherein the physiological object comprises a skull bone.
9. The device of Claim 9 wherein the pressure generating device comprises an inflatable helmet.

10. The device of Claim 9 wherein the pressure generating device comprises a piston and cylinder assembly mounted on a frame.

11. The device of Claim 7 wherein the physiological object comprises a tympanic membrane of an ear.

12. The device of Claim 11 wherein the pressure generating device comprises a tube adapted for insertion into an ear.

13. A method for obtaining an indication of the intracranial pressure of a living body, comprising the steps of:

determining an initial position of an elastic biological object when the intracranial pressure within the living body is zero;

determining a subsequent position of the elastic biological object when the intracranial pressure within the living body is unknown but greater than zero;

applying an external pressure to the elastic biological object; and
identifying the unknown intracranial pressure of the living body as that external pressure which causes the subsequent position to be equal to the initial position.

14. The method of Claim 13 wherein the elastic biological object comprises a skull bone.

15. The method of Claim 14 wherein the applying an external pressure step comprises the step of inflating an inflatable helmet.

16. The method of Claim 14 wherein the applying an external pressure step comprises the step of actuating a piston and cylinder assembly mounted on a frame.

17. The method of Claim 13 wherein the elastic biological object comprises a tympanic membrane of an ear.

18. The method of Claim 17 wherein the applying an external pressure step comprises the step of flowing fluid through a tube adapted for insertion into an ear.

19. A method for obtaining a measurement of the absolute pressure inside a cranium, comprising the steps of:

determining a first position of a physiological object affected by intracranial pressure when the intracranial pressure is balanced with atmospheric pressure; and

applying a force against the physiological object until the position of the object is restored to its first position and storing a value of the force at which this occurs.

20. The method of Claim 19 wherein the physiological object comprises a skull bone.

21. The method of Claim 20 wherein the applying a force step comprises the step of inflating an inflatable helmet.

22. The method of Claim 20 wherein the applying a force step comprises the step of actuating a piston and cylinder assembly mounted on a frame.

23. The method of Claim 19 wherein the physiological object comprises a tympanic membrane of an ear.

24. The device of Claim 23 wherein the applying a force step comprises the step of flowing fluid through a tube adapted for insertion into an ear.